

AMENDMENTS TO THE CLAIMS

Claims 1-20 (canceled)

Claim 21 (NEW) An isolated polypeptide selected from the group consisting of:

- a) a polypeptide comprising an amino acid sequence of SEQ ID NO:1, SEQ ID NO:2
SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ
ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID
NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID
NO:18, and SEQ ID NO:19,
- b) a polypeptide comprising a naturally occurring an amino acid sequence at least 90%
identical to an amino acid sequence of SEQ ID NO:1, SEQ ID NO:2 SEQ ID NO:3,
SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ
ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ
ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, and
SEQ ID NO:19,
- c) a biologically active fragment of a polypeptide having an amino acid sequence of SEQ
ID NO:1, SEQ ID NO:2 SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID
NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID
NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID
NO:16, SEQ ID NO:17, SEQ ID NO:18, and SEQ ID NO:19, and
- d) an immunogenic fragment of a polypeptide having an amino acid sequence of SEQ ID
NO:1, SEQ ID NO:2 SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6,
SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11,
SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16,
SEQ ID NO:17, SEQ ID NO:18, and SEQ ID NO:19.

Claim 22 (NEW) An isolated polypeptide selected from the group consisting of:

- a) a polypeptide comprising an amino acid sequence of SEQ ID NO:6,
- b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:6,
- c) a biologically active fragment of a polypeptide having the amino acid sequence of SEQ ID NO:6, and
- d) an immunogenic fragment of a polypeptide having the amino acid sequence of SEQ ID NO:6.

Claim 23 (New) An isolated polynucleotide encoding a polypeptide of claim 22.

Claim 24 (NEW) A polypeptide of claim 22, comprising the amino acid sequence of SEQ ID NO:6.

Claim 25 (New) An isolated polynucleotide encoding a polypeptide of claim 24.

Claim 26 (New) An isolate polynucleotide of claim 25 comprising the polynucleotide sequence of SEQ ID NO:25.

Claim 27 (NEW) A method of producing a polypeptide of claim 21, the method comprising:

- a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 21, and
- b) recovering the polypeptide so expressed.

Claim 28 (NEW) A method of claim 27, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:6.

Claim 29 (NEW) An isolated antibody which specifically binds to the polypeptide of claim 22.

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Claim 30 (NEW) An isolated polynucleotide selected from the group consisting of:

- a) a polynucleotide comprising a polynucleotide sequence of SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, and SEQ ID NO:38,
- b) a polynucleotide comprising a polynucleotide sequence at least 90% identical to a polynucleotide sequence of SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, and SEQ ID NO:38,
- c) a polynucleotide complementary to a polynucleotide of a),
- d) a polynucleotide complementary to a polynucleotide of b) and
- e) an RNA equivalent of a)-d).

Claim 31 (New) A polynucleotide of claim 30, comprising the polynucleotide sequence of SEQ ID NO:25.

Claim 32 (NEW) A composition comprising the polypeptide of claim 22 and a pharmaceutically acceptable excipient.

Claim 33 (NEW) A composition of claim 32, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:6.

Claim 34 (NEW) A method for treating a disease or condition associated with decreased expression of functional IGFAM, comprising administering to a patient in need of such treatment the composition of claim 33.

Claim 35 (NEW) A method for screening a compound for effectiveness as an agonist of a polypeptide of claim 22, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 22 to a compound, and
- b) detecting agonist activity in the sample.

Claim 36 (NEW) A composition comprising an agonist compound identified by a method of claim 35 and a pharmaceutically acceptable excipient.

Claim 37. (NEW) A method for treating a disease or condition associated with decreased expression of functional IGFAM, comprising administering to a patient in need of such treatment a composition of claim 36.

Claim 38 (NEW) A method of screening for a compound that specifically binds to the polypeptide of claim 22, said method comprising:

- a) combining the polypeptide of claim 22 with at least one test compound under suitable conditions, and
- b) detecting binding of the polypeptide of claim 22 to the test compound, thereby identifying a compound that specifically binds to the polypeptide of claim 22.

Claim 39 (NEW) A method of screening for a compound that modulates the activity of the polypeptide of claim 22, said method comprising:

- a) combining the polypeptide of claim 22 with at least one test compound under conditions permissive for the activity of the polypeptide of claim 22,

- b) assessing the activity of the polypeptide of claim 22 in the presence of the test compound, and
- c) comparing the activity of the polypeptide of claim 22 in the presence of the test compound with the activity of the polypeptide of claim 22 in the absence of the test compound, wherein a change in the activity of the polypeptide of claim 22 in the presence of the test compound is indicative of a compound that modulates the activity of the polypeptide of claim 22.

Claim 40 (New) A method of screening a compound for effectiveness as an antagonist of a polypeptide of claim 22, the method comprising:

- a) contacting a sample comprising a polypeptide of claim 22 with a compound, and
- b) detecting antagonist activity in the sample.

Claim 41 (New) A composition comprising an antagonist compound identified by a method of claim 40 and a pharmaceutically acceptable excipient.

Claim 42 (New) A method for treating a disease or condition associated with overexpression of functional IGFAM, comprising administering to a patient in need of such treatment a composition of claim 41.

Claim 43 (New) An isolated polynucleotide comprising at least 60 contiguous nucleotides of a polynucleotide of claim 31.

Claim 44 (New) A microarray wherein at least one element of the microarray is a polynucleotide of claim 43.